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REMARKS

Kindly enter this Preliminary Amendment before first action on the merits. By this Preliminary Amendment, Applicants have amended the specification to correct minor typographical errors. These amendments introduce no new matter.

Respectfully submitted,

Anthony J. GOUNALIS

By: Randy J. Pritzker

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Docket No. L0562.70033US00

Date: March 1, 2004

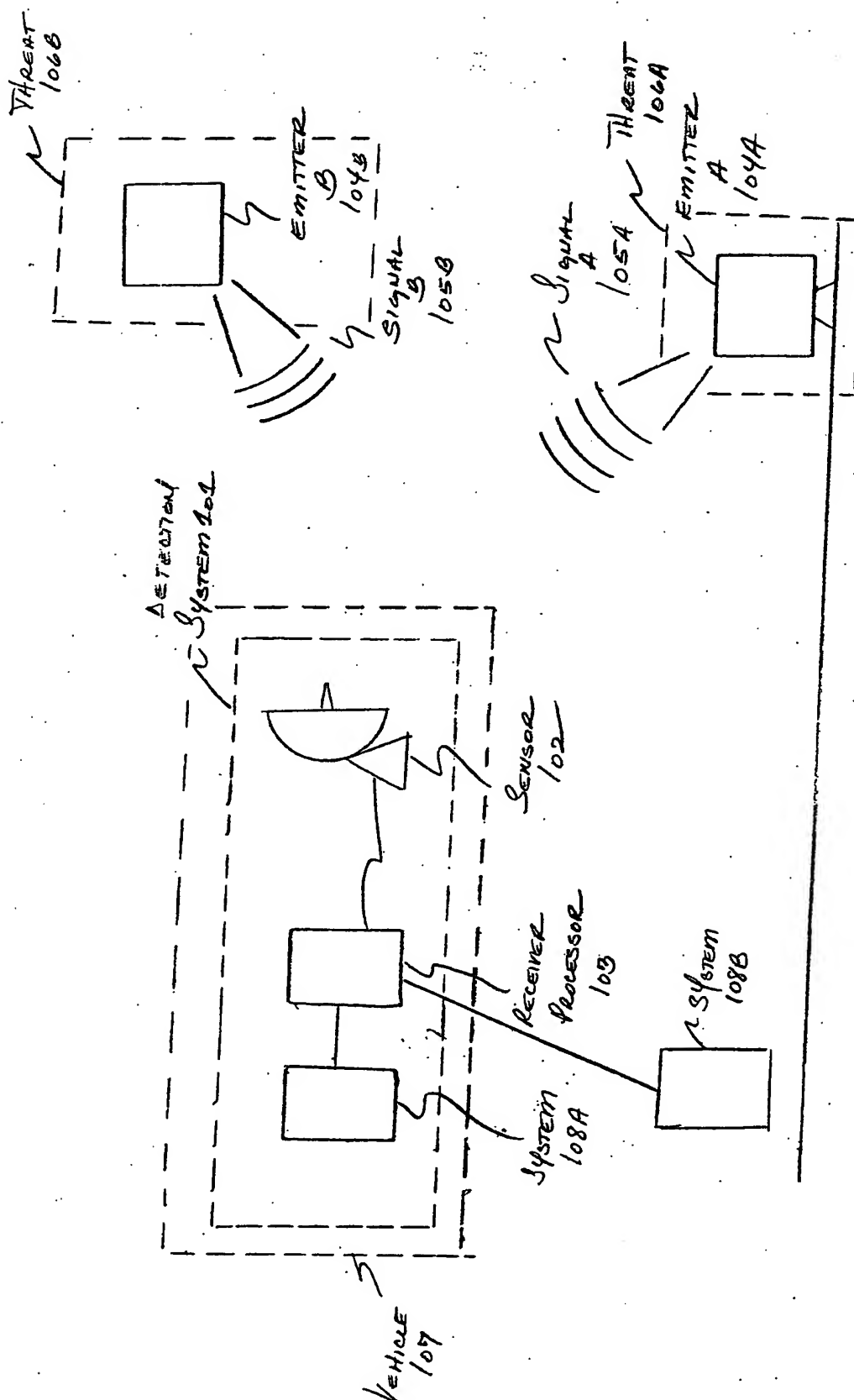


FIGURE 1

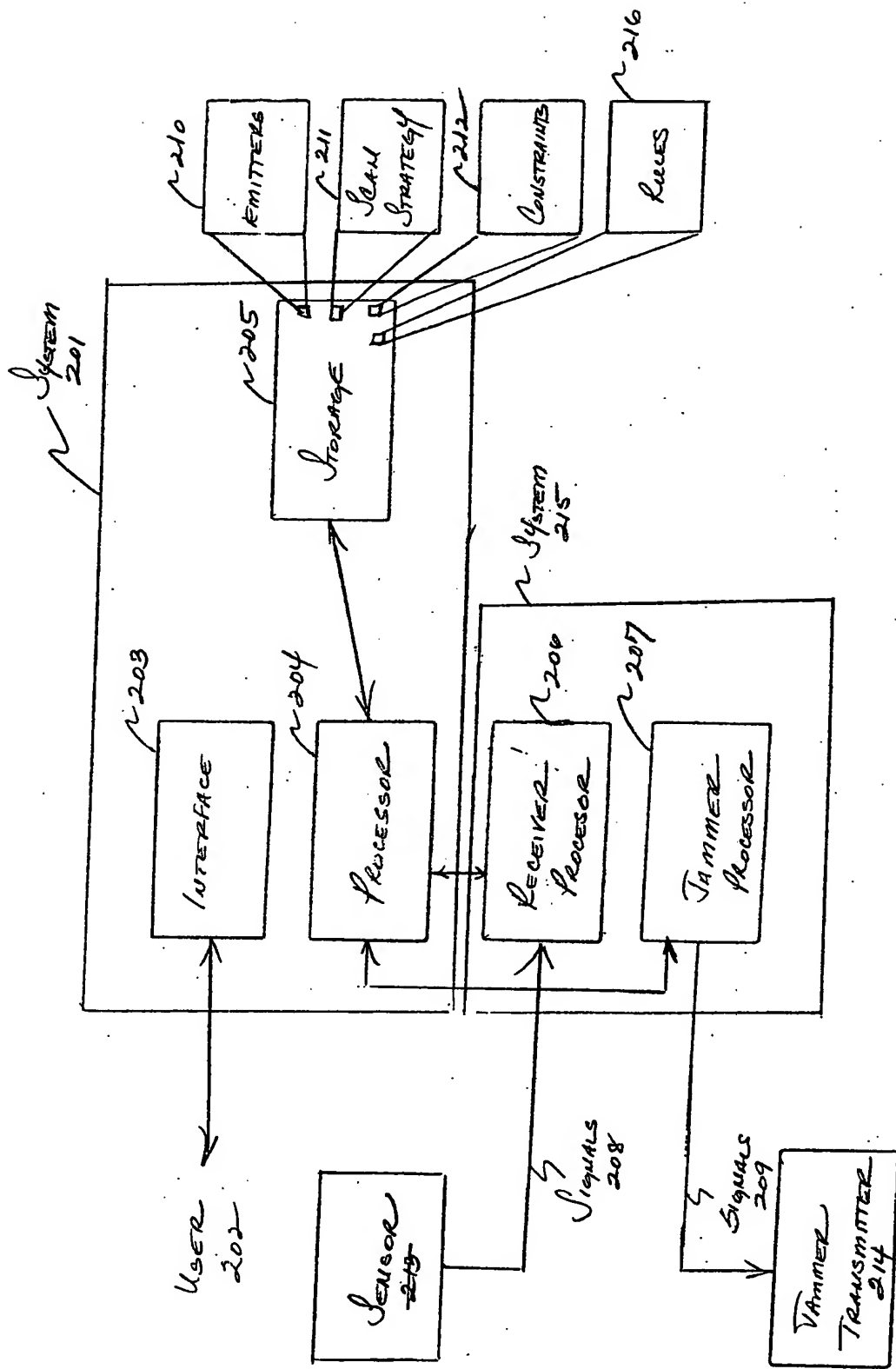
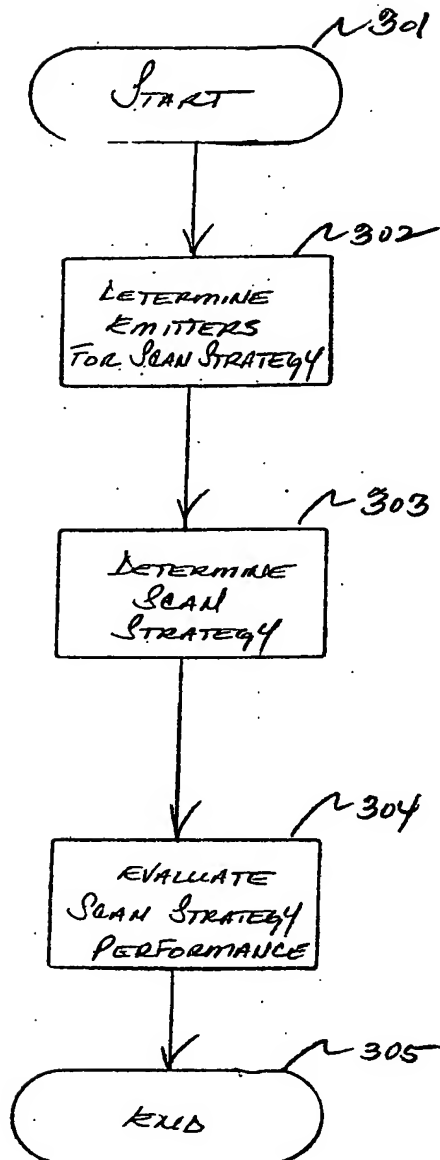


Figure 2



PROCESS
300

FIGURE 3

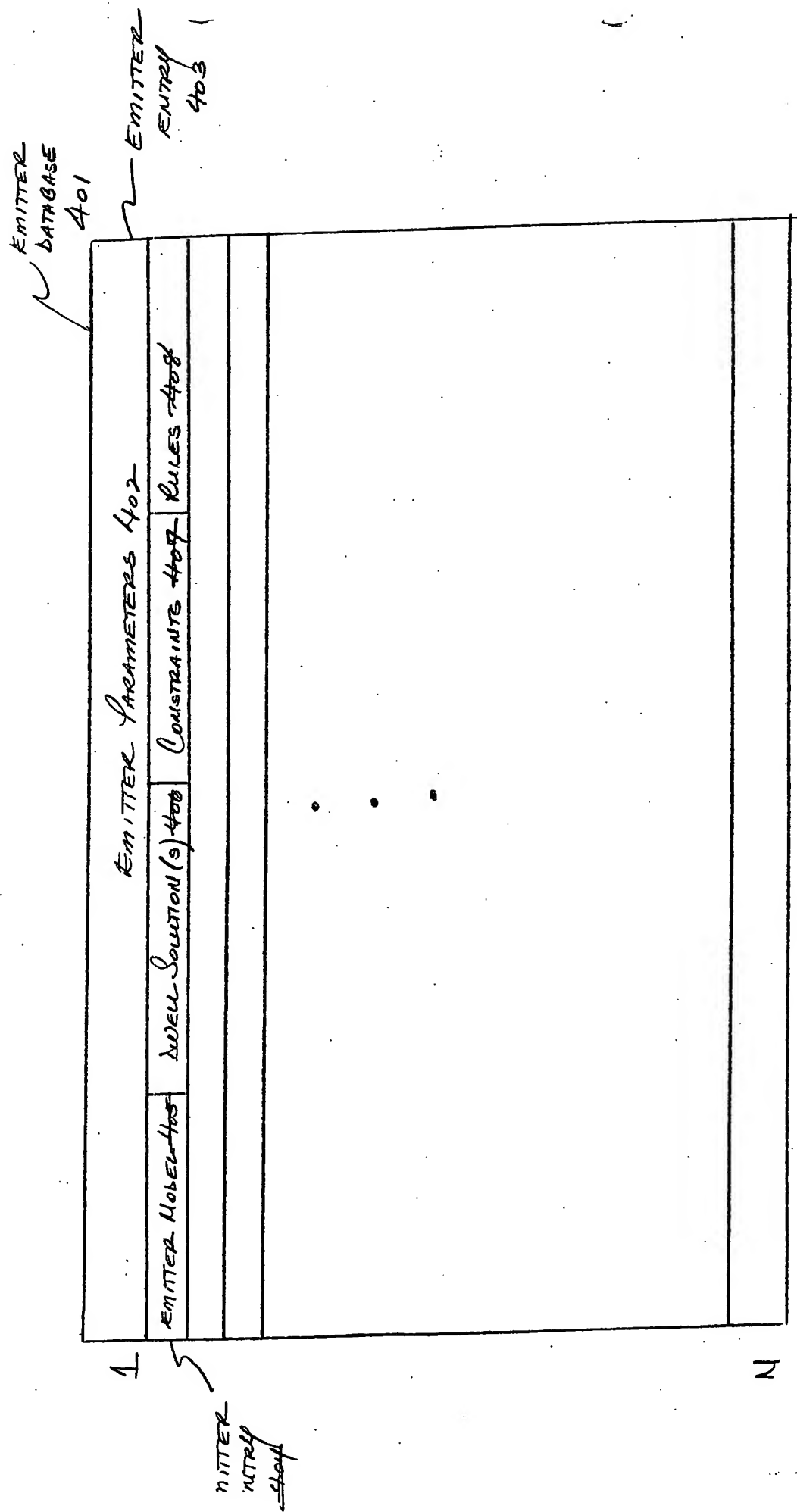


Figure 4

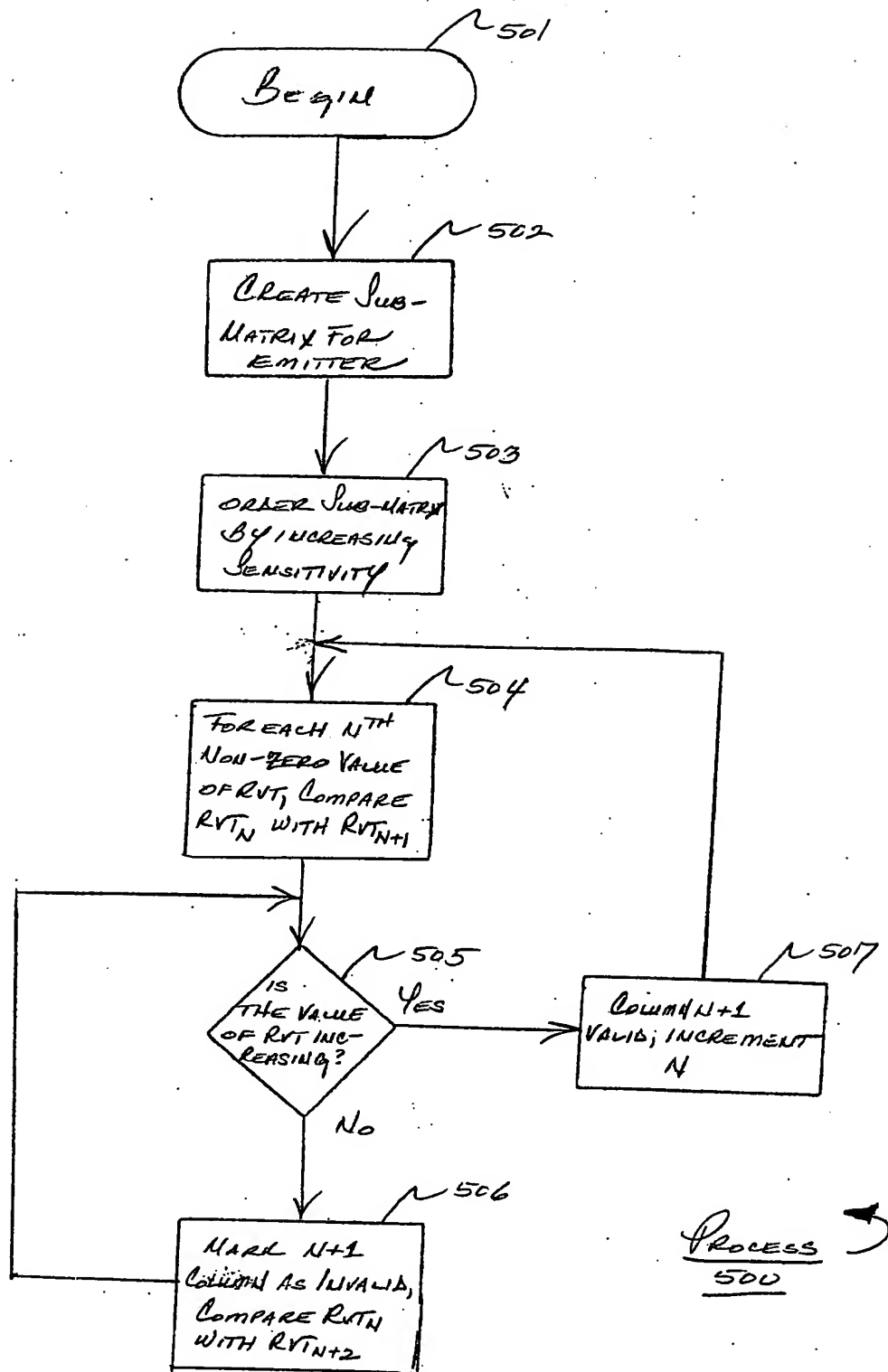


FIGURE 5

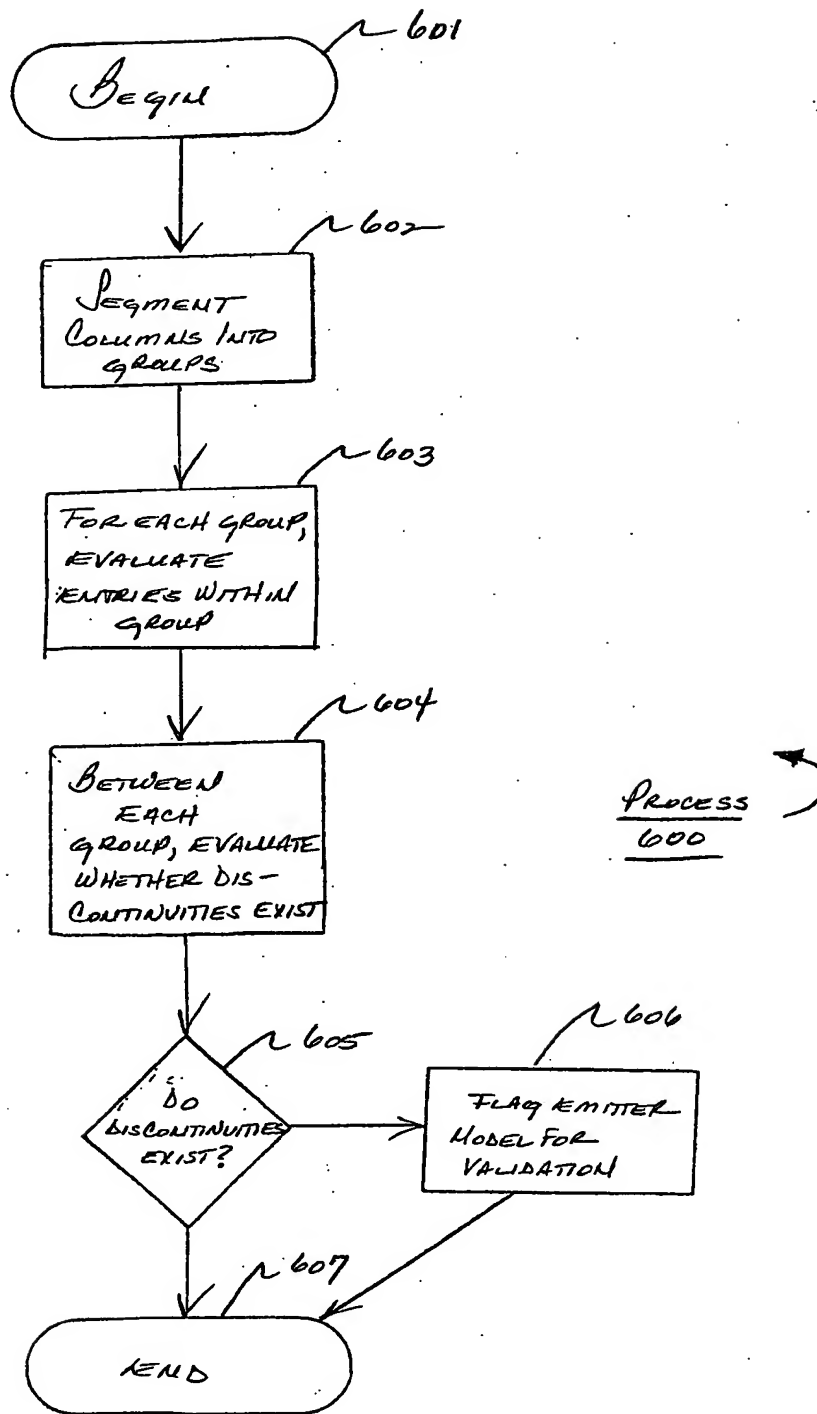


FIGURE 6

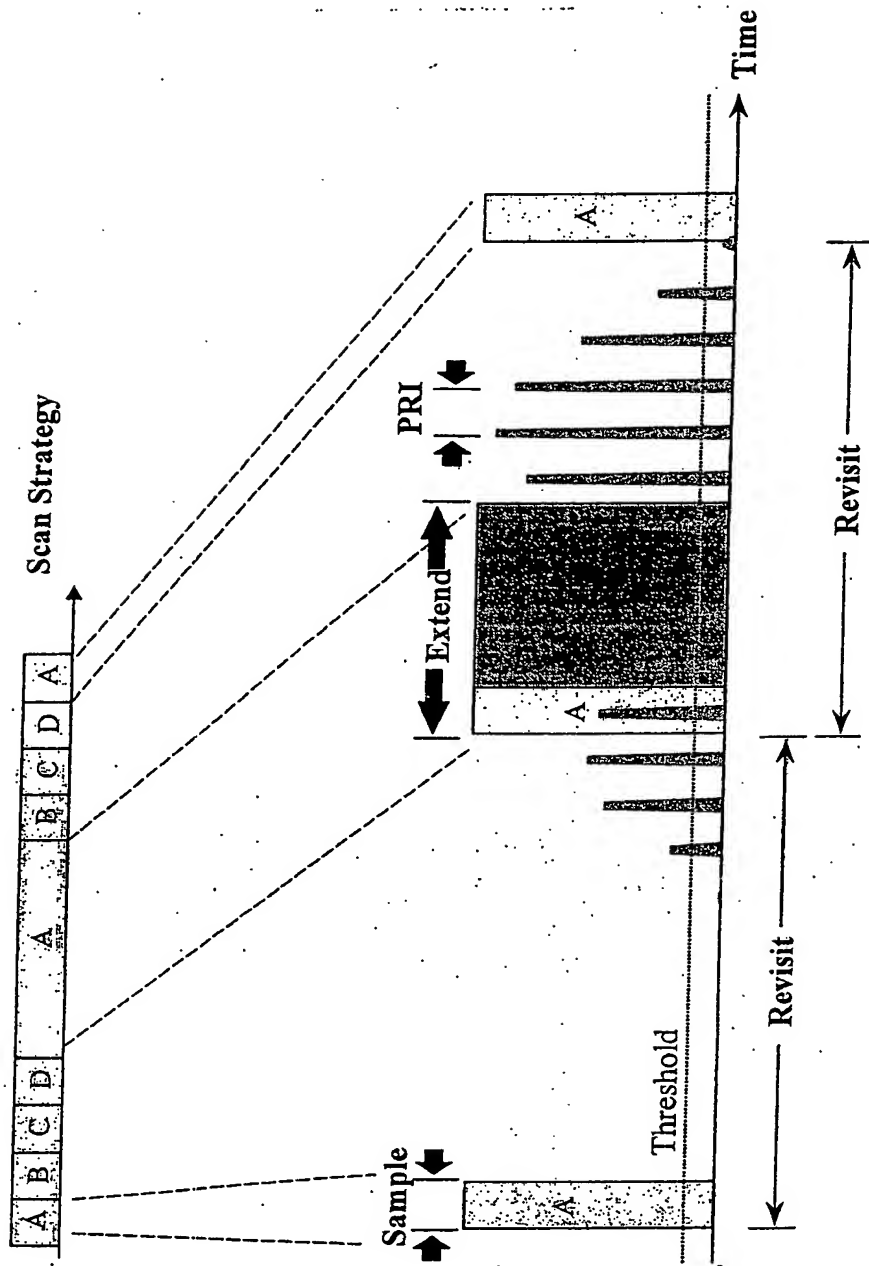
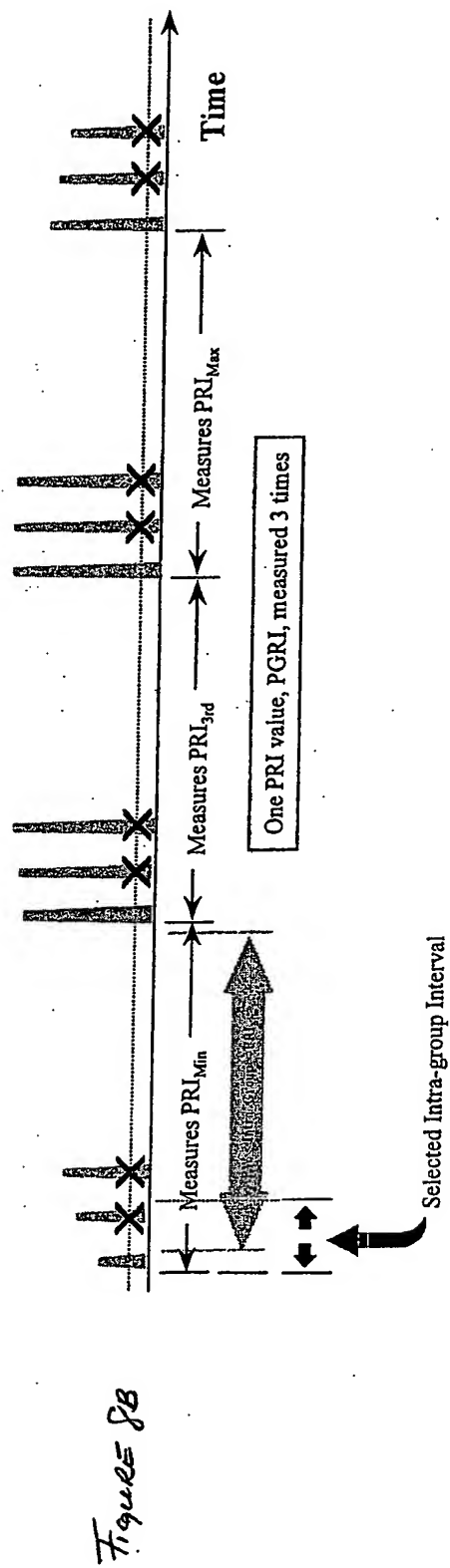
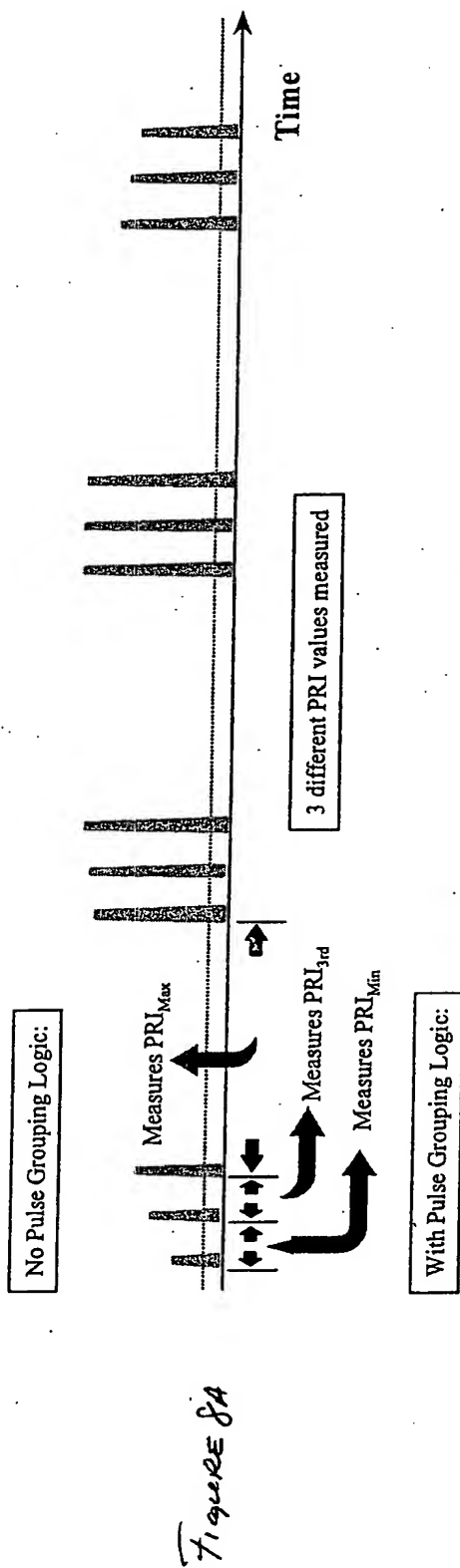


Figure 17



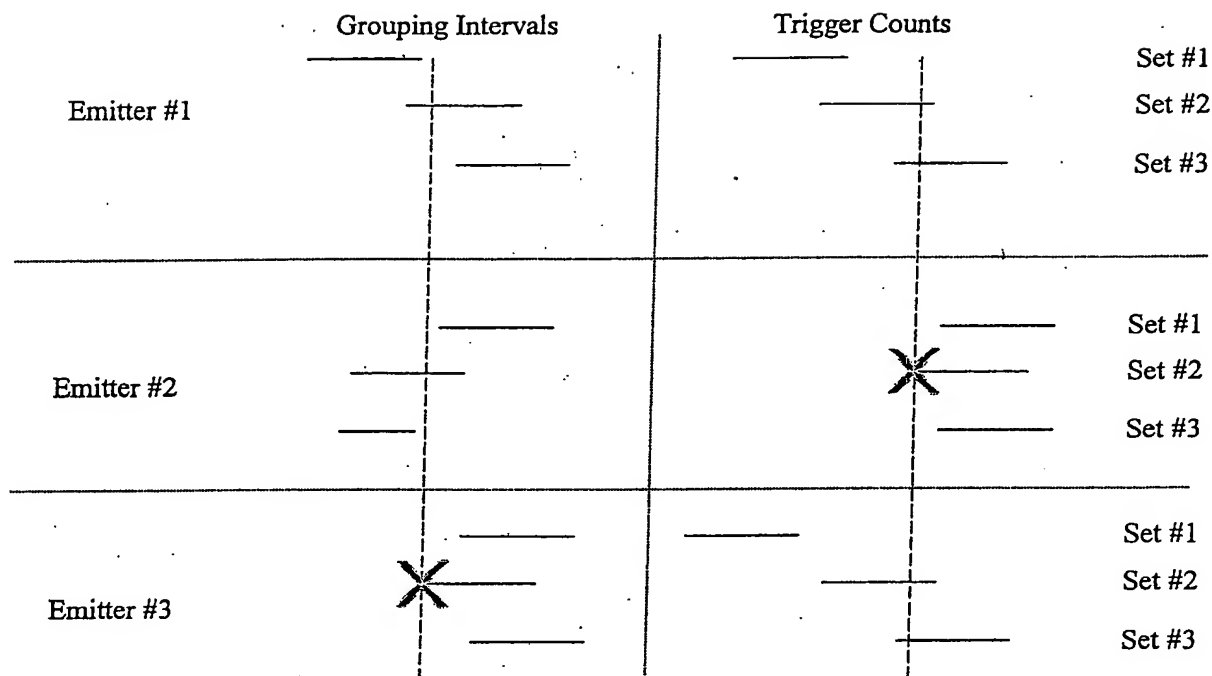
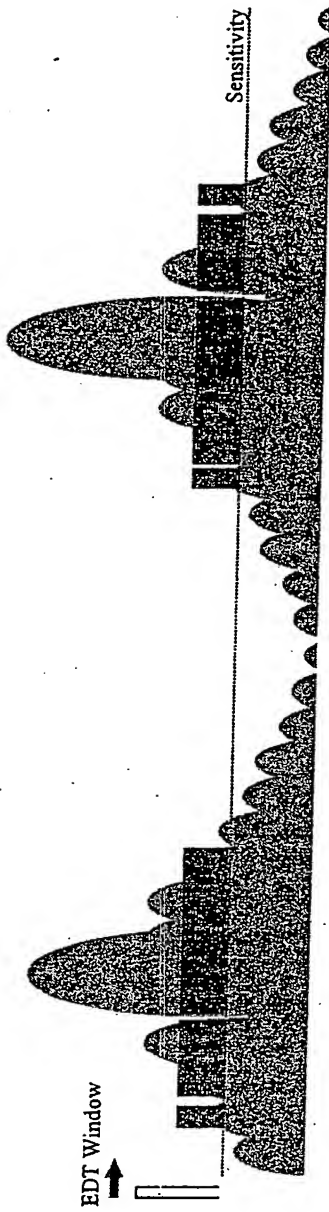


Figure 9

Figure 10A



Discrete Illuminations (TIBS)

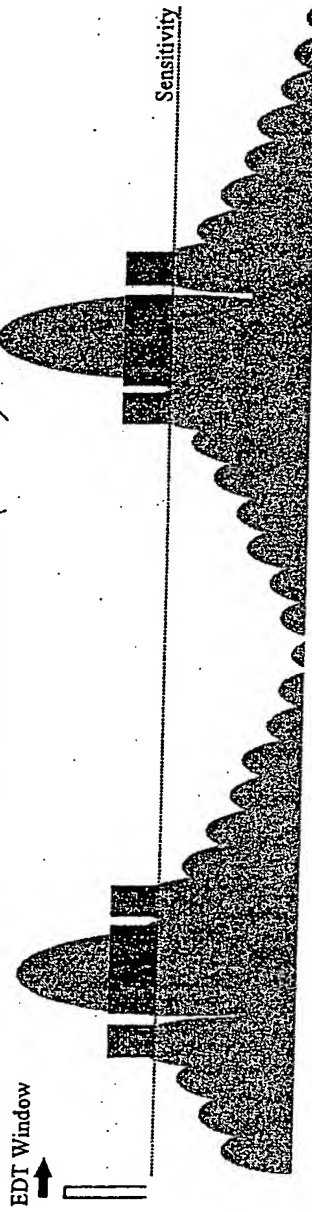


Figure 10B

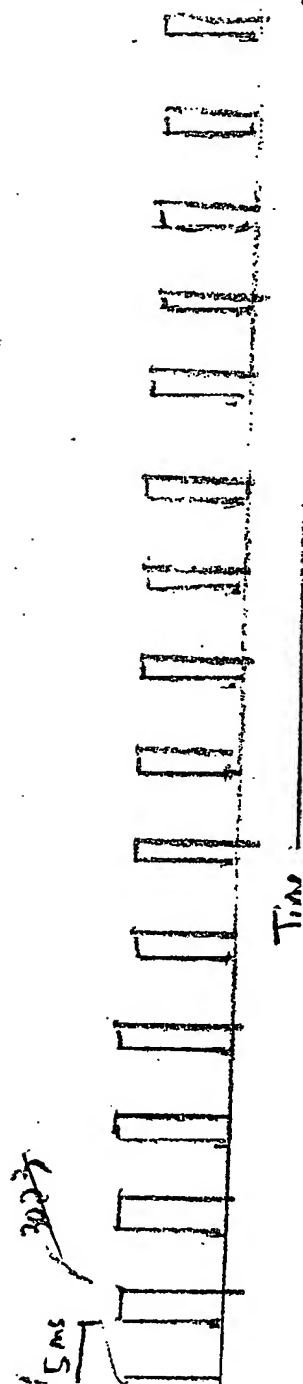
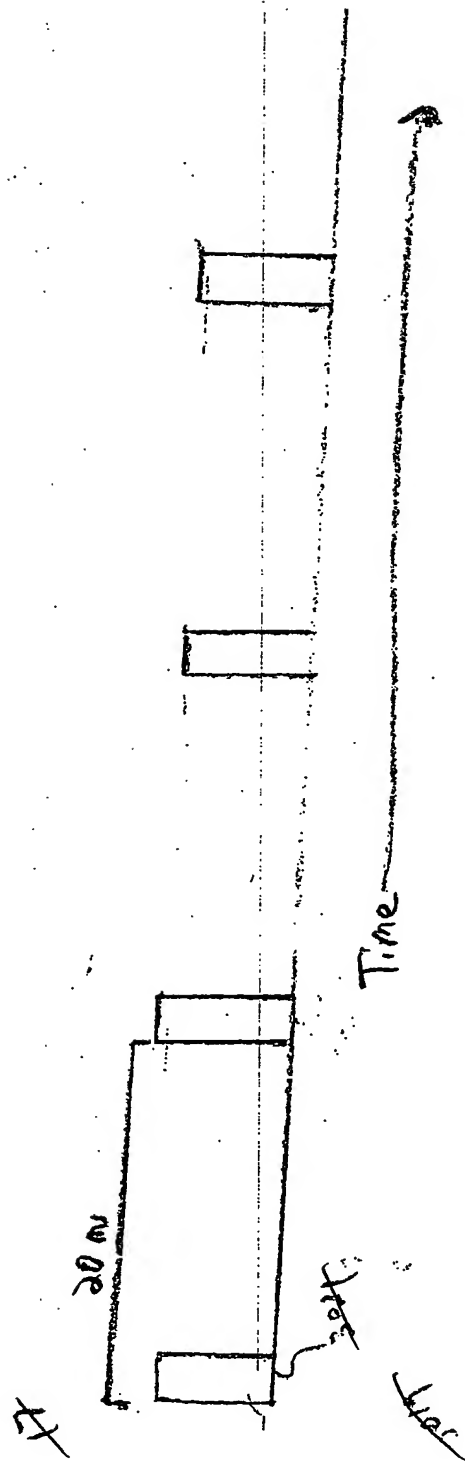
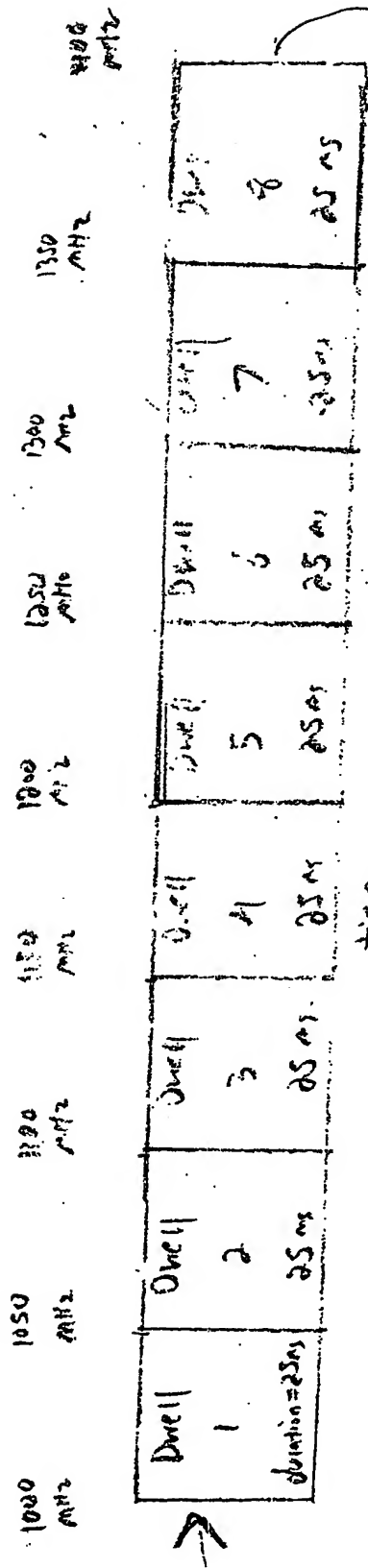
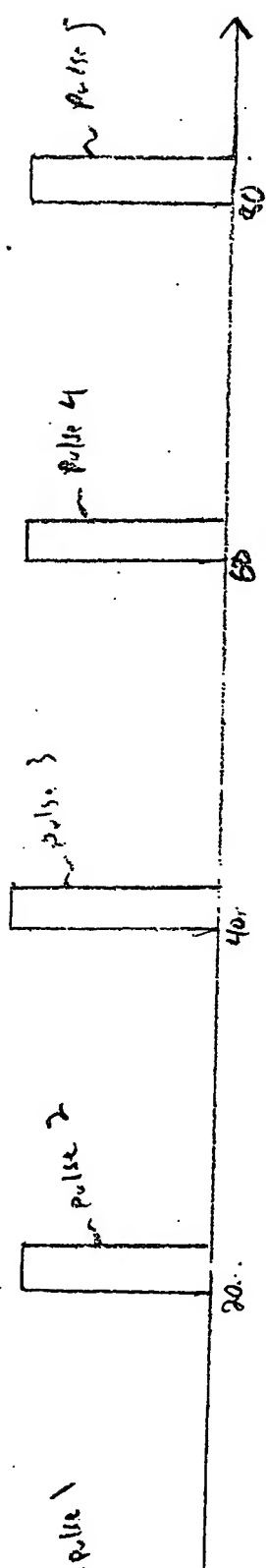


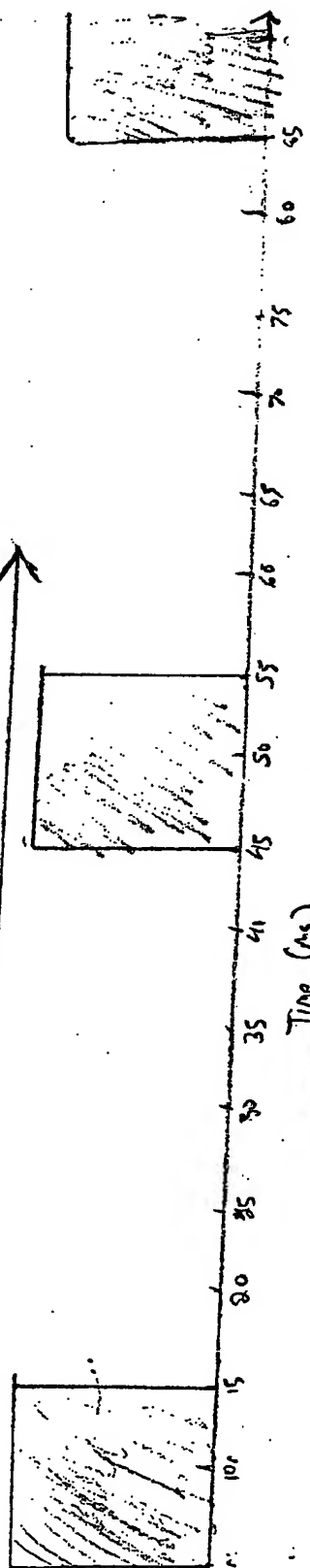
Figure 11

PRI = 20ns



Emitter 3101

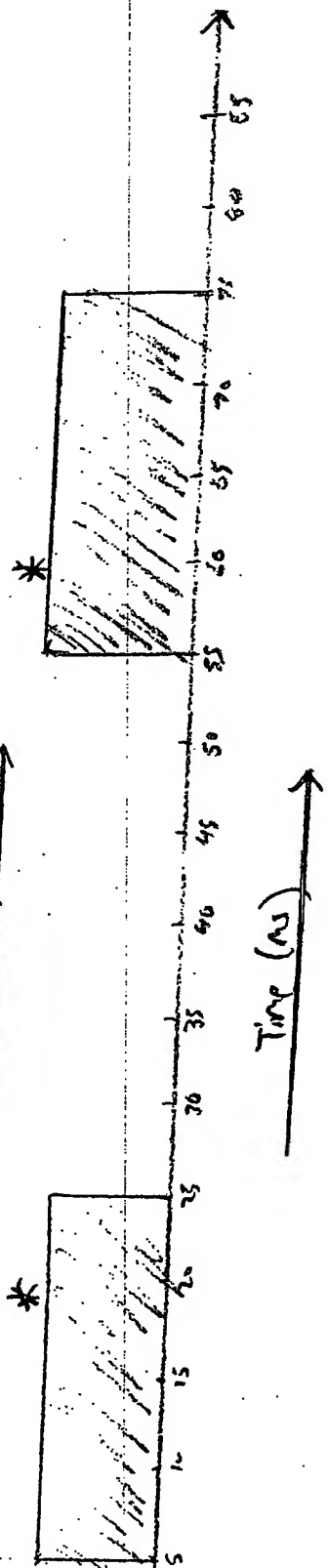
Time (ms)



Solution 1

Dwell Duration = 10ms
Revisit Time = 40ms

Time (ms)



Solution 2

Dwell Duration = 20ms
Revisit Time = 50ms

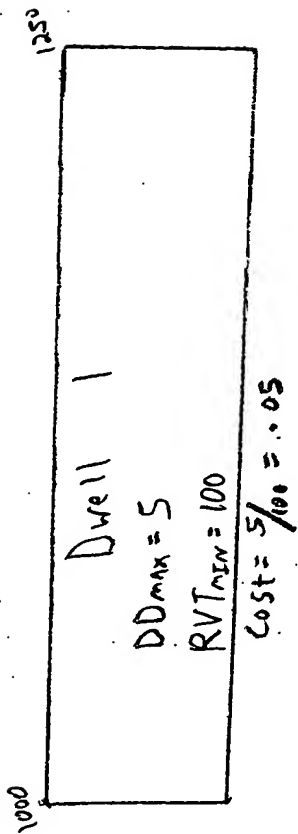
Time (ms)

Figure 12

4000

Emitter Name	Operating Mode 250 MHz IF 15 MHz VSW	Operating Mode 30 MHz IF 15 MHz VSW	RF Min (MHz)	RF Max (MHz)	RF Mod (MHz)
E1	100 ns	150 ns	1000	1300	3
E2	100 ns	780 ns	1220	1350	5
E3	110 ns	330 ns	1510	1810	2
E4	130 ns	390 ns	1730	1860	4

Figure B



Solution 1

	1000	1060	1120	1180	1150	1210	1240	1270
Dwell 1	Dwell 2	Dwell 3	Dwell 4	Dwell 5	Dwell 6	Dwell 7	Dwell 8	Dwell 9
DD _{max}	3	3	3	3	3	3	5	5
RVT _{min}	650	650	650	650	650	650	650	650
Cost	$\frac{3}{650} + \frac{5}{650}$	$\frac{3}{650} + \frac{5}{650}$	$\frac{3}{650} + \frac{5}{650}$	$\frac{3}{650} + \frac{5}{650}$	$\frac{3}{650} + \frac{5}{650}$	$\frac{3}{650} + \frac{5}{650}$	$\frac{5}{650} + \frac{5}{650}$	$\frac{5}{650}$
Total Cost	$\frac{31}{650} \approx 0.048$							

Solution 2

Figure 14A

1510

1760

<p>Dwell 1</p> <p>DDmax = 4 ns</p> <p>RV T_{max} = 330 ns</p> <p>Cost = $\frac{4}{330} = .012$</p>

Solution 1

1510 1540 1570 1600 1630 1660 1690 1720 1750 1780

Dwell 1	Dwell 2	Dwell 3	Dwell 4	Dwell 5	Dwell 6	Dwell 7	Dwell 8	Dwell 9
DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 4	DDmax 4
RV T _{max} 330 ns	RV T _{max} 330 ns	RV T _{max} 330 ns	RV T _{max} 330 ns	RV T _{max} 330 ns	RV T _{max} 330 ns	RV T _{max} 330 ns	RV T _{max} 330 ns	RV T _{max} 330 ns

$$\text{Cost} = \frac{8}{330} + \frac{\text{Cost}}{2} + \frac{\text{Cost}}{330} + \frac{\text{Cost}}{2} + \frac{\text{Cost}}{330} + \frac{\text{Cost}}{2} + \frac{\text{Cost}}{330} + \frac{\text{Cost}}{2} + \frac{\text{Cost}}{330} = \frac{28}{330} = .08$$

Solution 2

Figure 14B

Figure 15

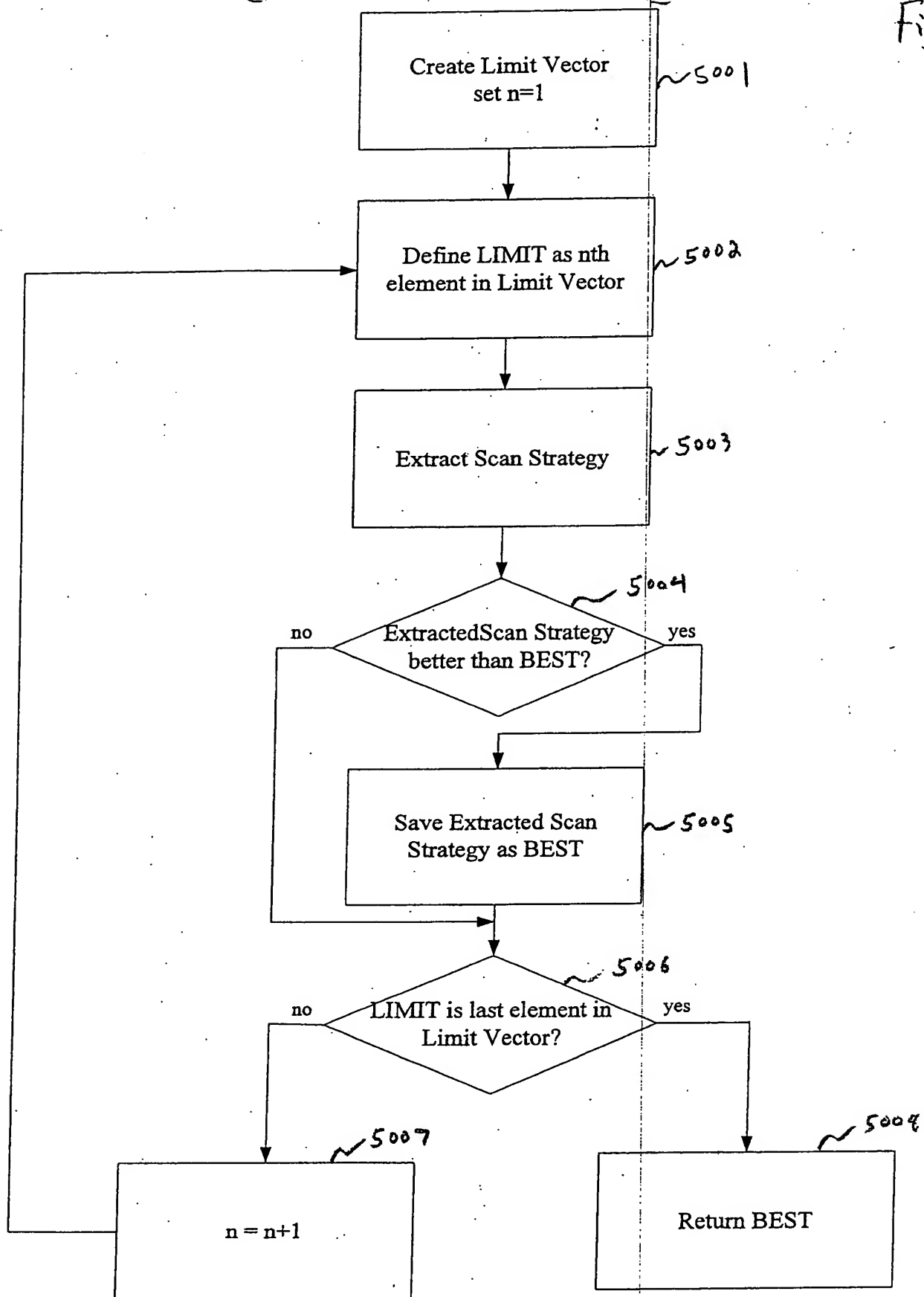
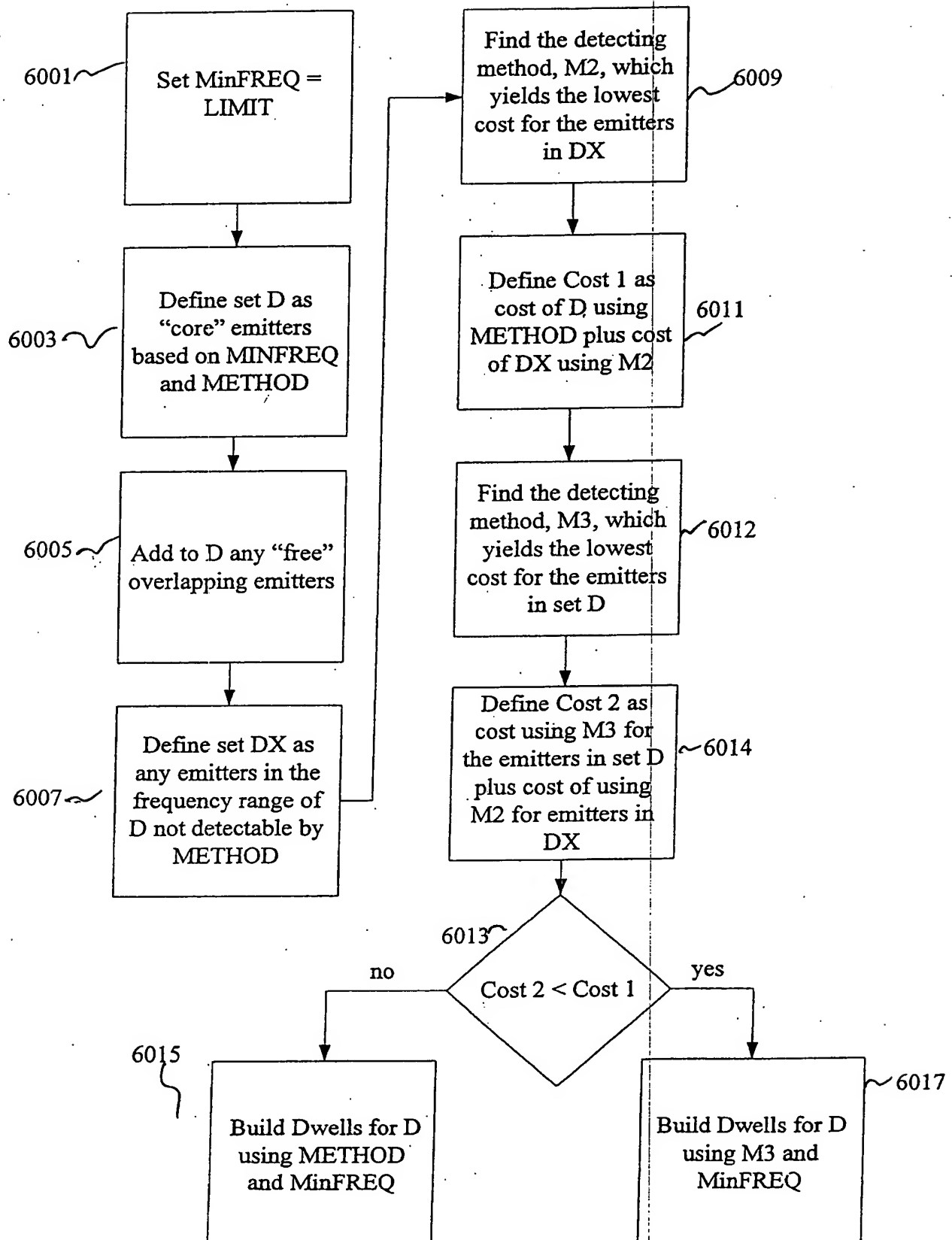


Figure 16



Name	RF Min	RF Max
E1	1100	1200
E2	1150	1250

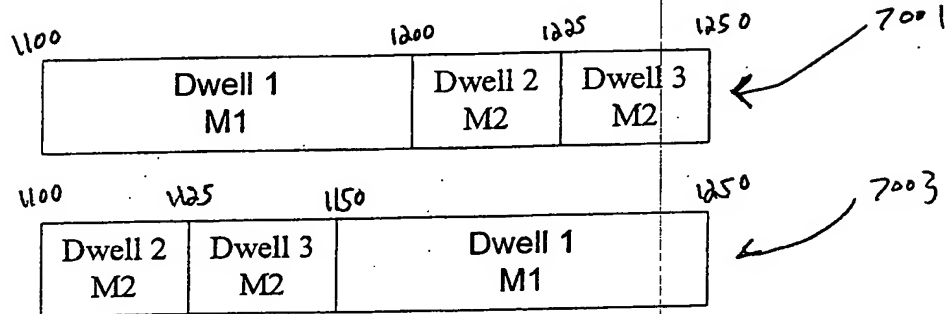
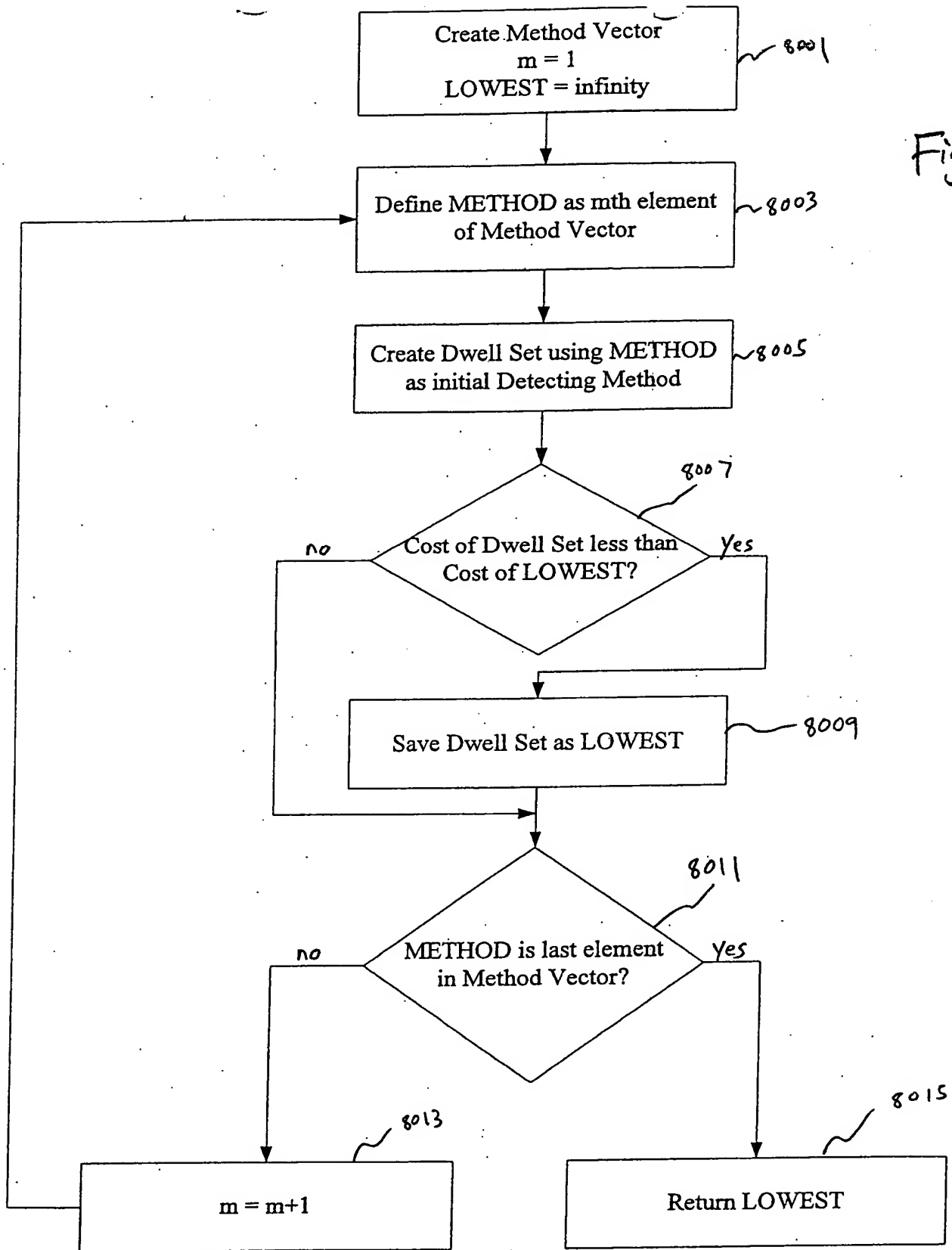


Figure 17

Figure 1:



Emitter	Dwell Duration (ms)	Revisit Time (ms)
Emitter 1	1	500
Emitter 2	2	1200

Figure 19

Emitter	Dwell Duration (ms)	Revisit Time (ms)	Cost
Emitter 1	1	500	.002
Emitter 2	5	1000	.005

Figure 20

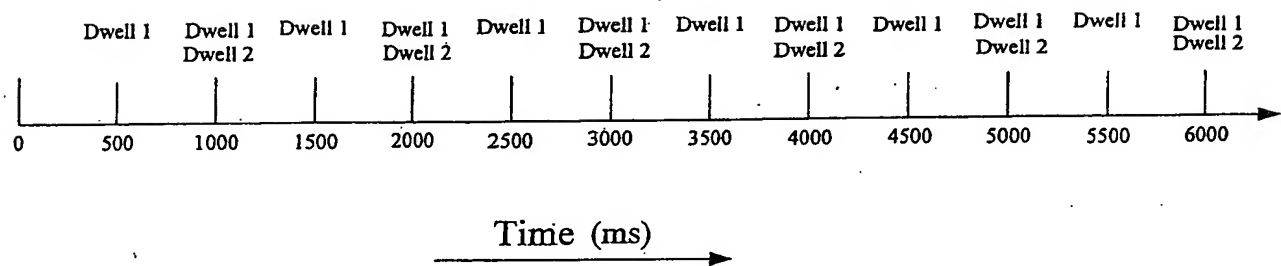


Figure 21

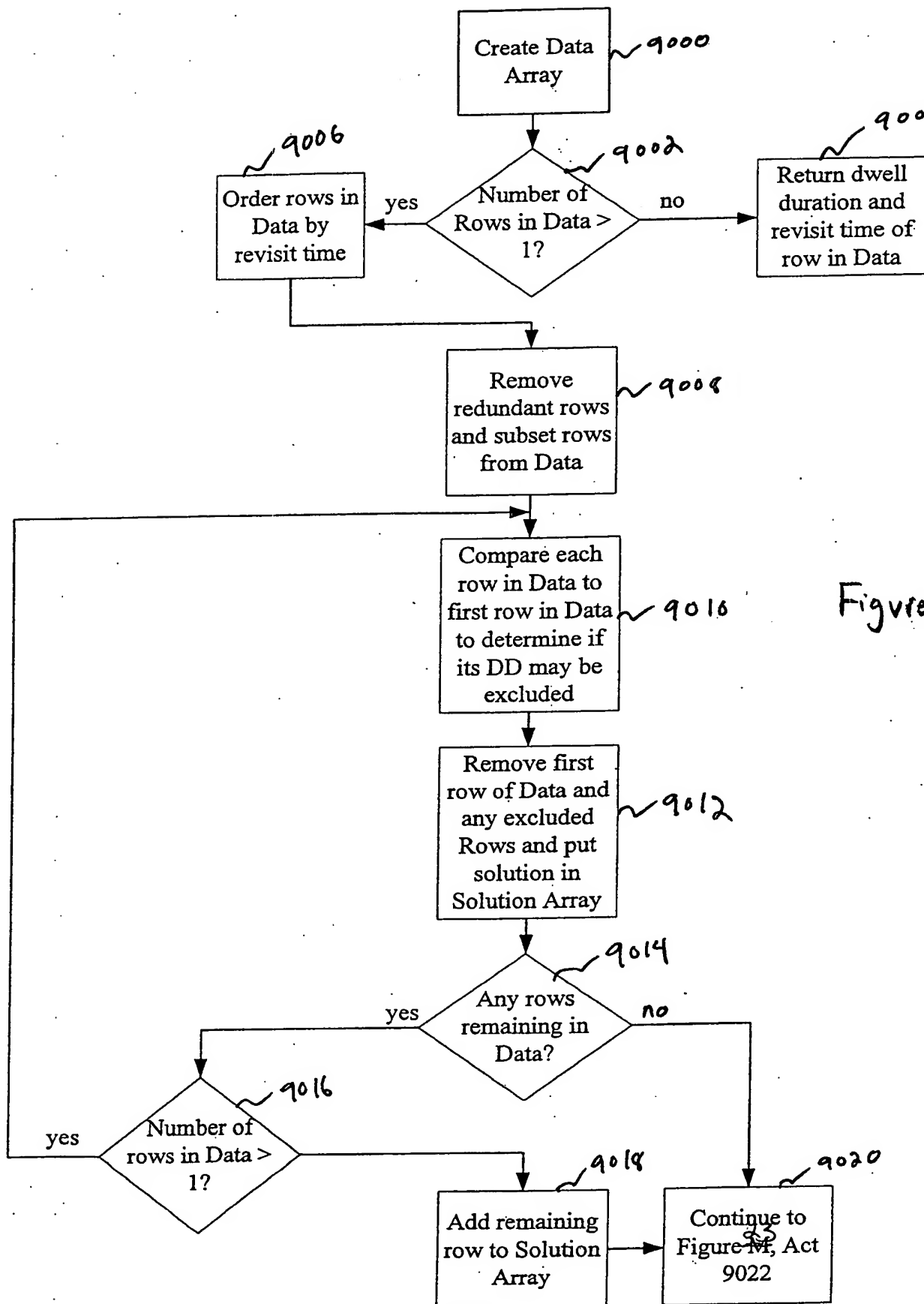


Figure 22

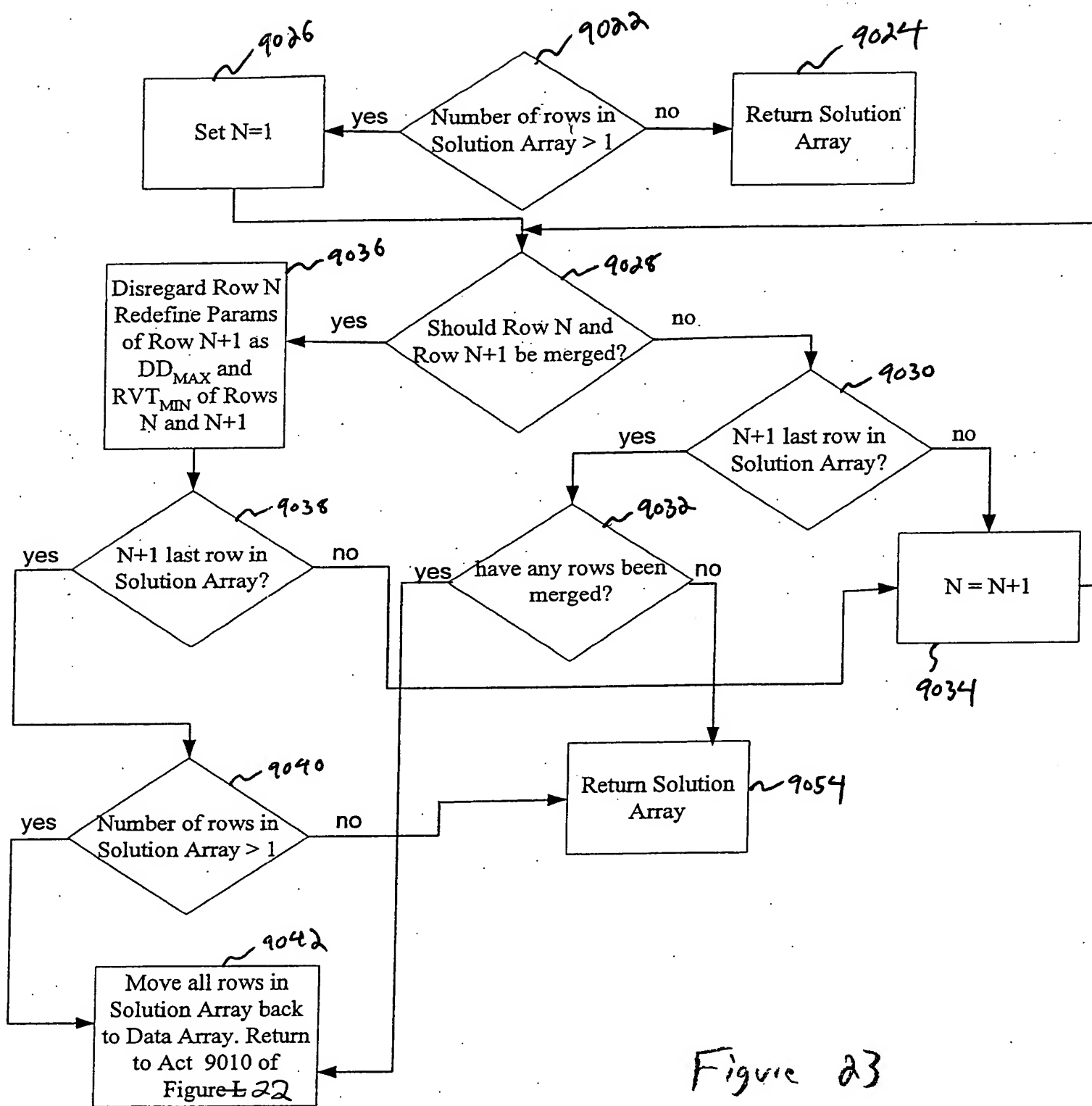


Figure 23

9044

Data		
MDT	EDT	RVT
3.05	17	2868
3	19	2000
3	19	2000
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000

Figure 24A

9044

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000
3	19	2000
3	19	2000
3.05	17	2868

9048
9049
9050

Figure 24B

9051
9052

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
3	19	2000
3.05	17	2868

Figure 24C

9044

Data		
MDT	EDT	RVT
2	9	700
2.3	11	800

9046

Solution		
MDT	EDT	RVT
1	19	500

Figure 24D

9044

Data		
MDT	EDT	RVT
1	7	500
2	9	700

9046

Solution		
MDT	EDT	RVT
1	19	500
2	11	700

Figure 24E

9046

Solution		
MDT	EDT	RVT
1	19	500
2	11	700

Figure 24F

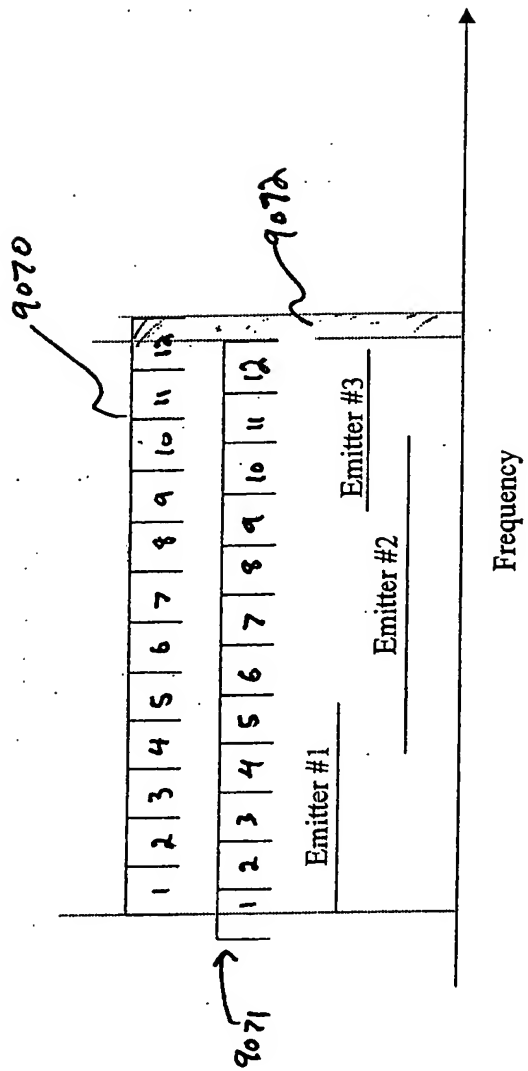


Figure 25

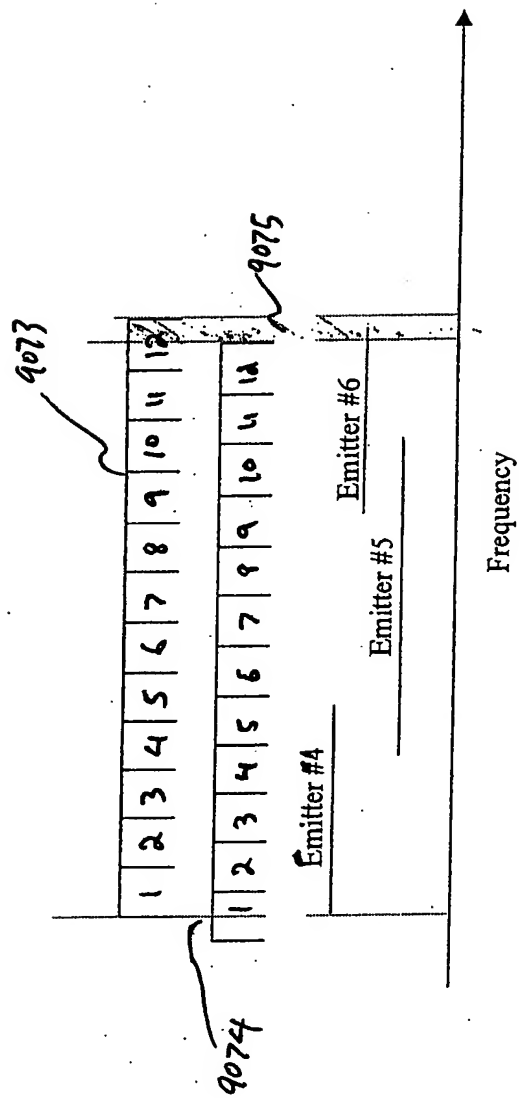


Figure 26

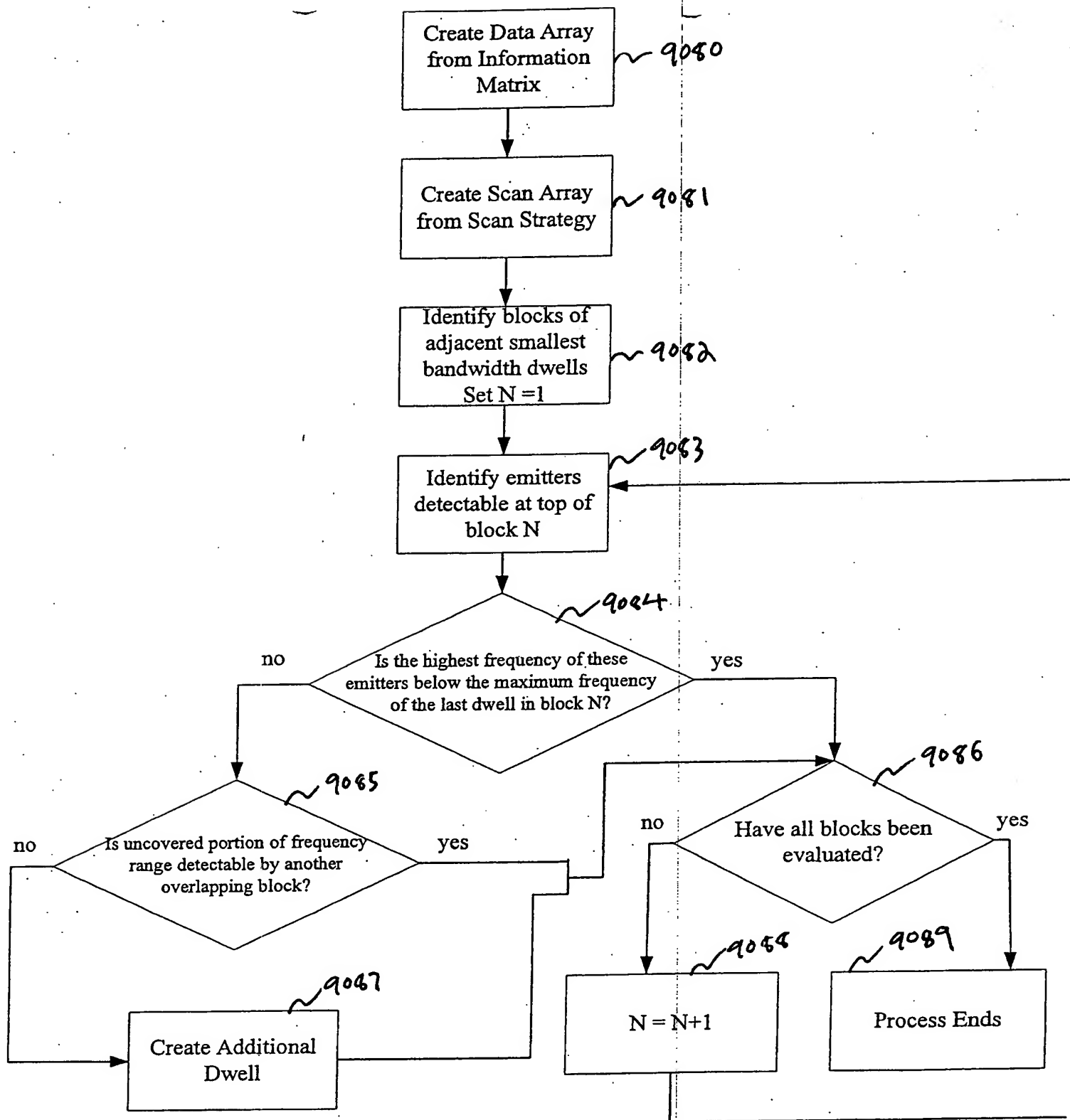
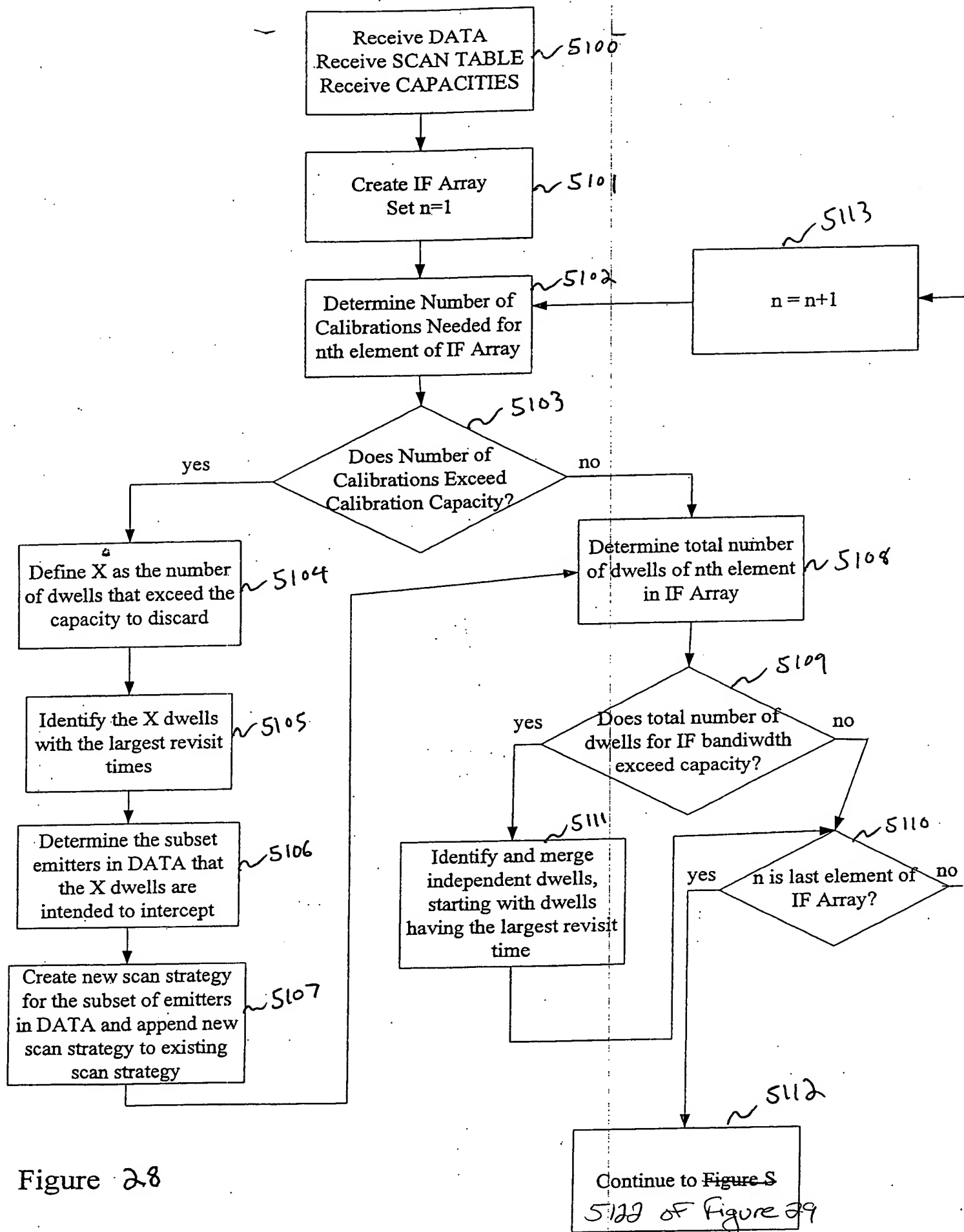


Figure 27



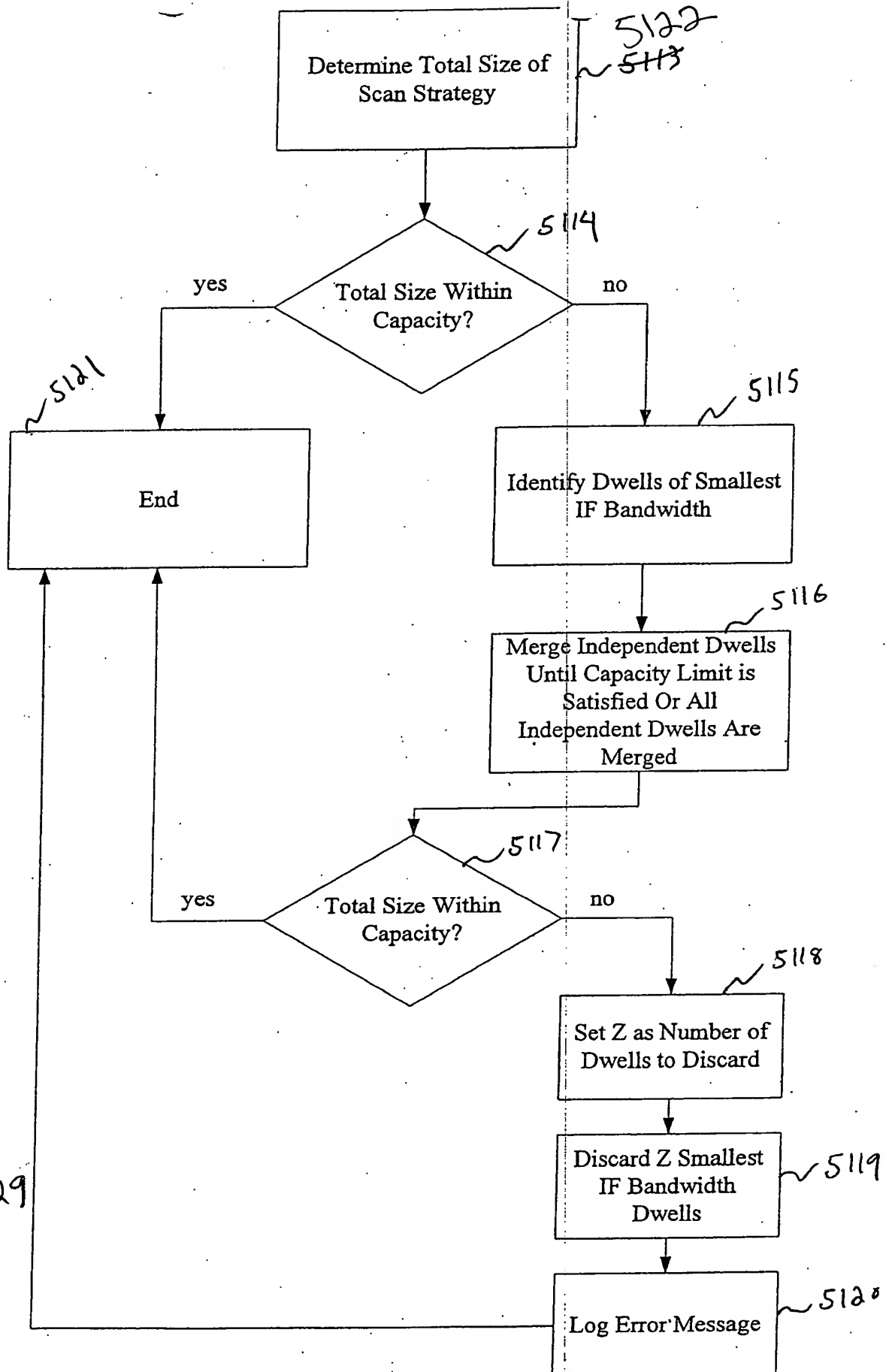


Figure 29

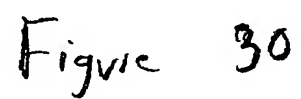


Figure 30

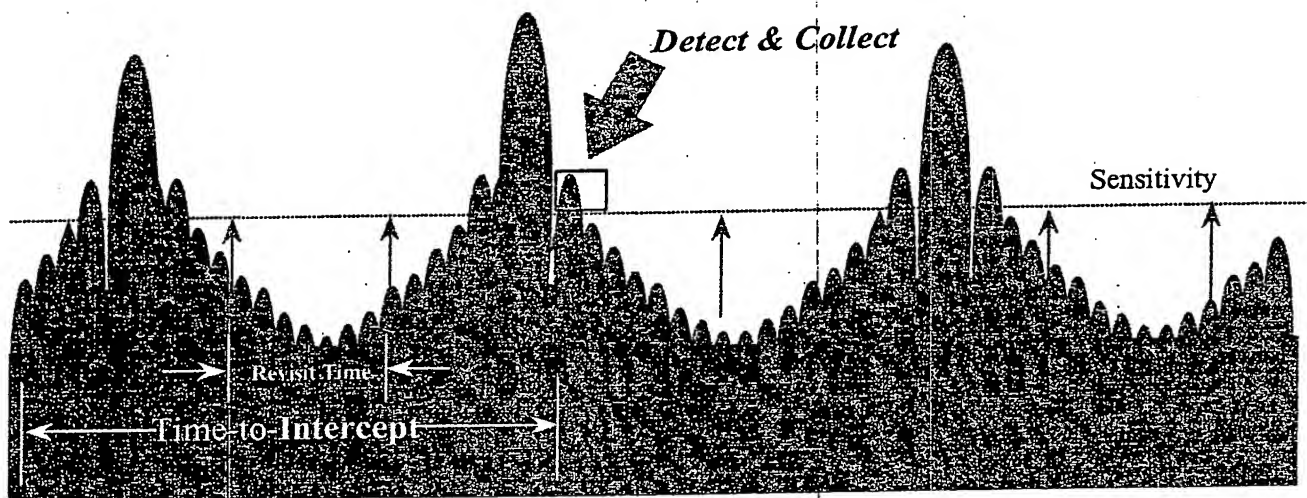


Figure 31

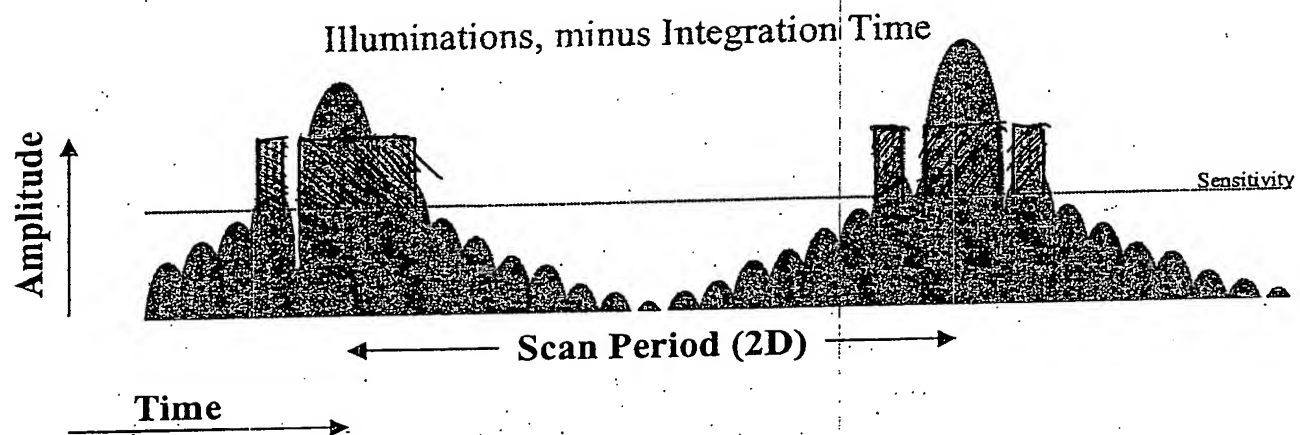


Figure 3a